ECOLOGICAL MONOGRAPHS

OFFICIAL PUBLICATION OF THE
ECOLOGICAL SOCIETY OF AMERICA

Volume 39, 1969

Published Quarterly by
The Duke University Press
Durham, N. C., U. S. A.

Nat. Sci.
QH
540
.E17
v.39
1969

TABLE OF CONTENTS

Volume 39, 1969

NUMBER 1, WINTER

Age-Distribution and Abundance in Populations of Flour Beetles. I. Experimental Studies ..... D. B. Mertz 1

Quantitative Studies of Salt March Faunas From the North American Pacific Coast ..... K. B. Macdonald 33

Ecological Differentiation in Sand Dropseed (*Sporobolus cryptandrus*) ..... J. A. Quinn and R. T. Ward 61

A Study of the Profundal Bottom Fauna of Lake Washington ..... R. N. Thut 79

NUMBER 2, SPRING

Accumulation and Cycling of Calcium by Dogwood Trees ..... W. A. Thomas 101

An Ecological History of the Lake Victoria Basin ..... R. L. Kendall 121

Allelopathic Effects of *Adenostoma fasciculatum*, "Chamise", in the California Chaparral ..... J. K. McPherson and C. H. Muller 177

An Experimental Study of the Mortality Factors of Larval *Musca autumnalis* DeGeer ..... I. Valiela 199

NUMBER 3, SUMMER

Thermodynamic Equilibria of Animals with Environment ..... W. P. Porter and D. M. Gates 227

A Study of the Ecology of Four Species of Herons During the Breeding Season at Lake Alice, Alachua County, Florida ..... D. A. Jenni 245

Forest Vegetation of the Montane and Subalpine Zones, Olympic Mountains, Washington ..... R. W. Fonda and L. C. Bliss 271

Factors Affecting the Distribution of *Pinus pungens*, an Appalachian Endemic ..... D. B. Zobel 303

NUMBER 4, FALL

Switching in General Predators: Experiments on Predator Specificity and Stability of Prey Populations ..... W. W. Murdoch 335

Microclimates, Fire, and Plant Production in an Illinois Prairie ..... S. M. Old 355

Altitudinal and Seasonal Distribution of Orthoptera in the Rocky Mountains of Northern Colorado ..... G. Alexander and J. R. Hilliard 385

The Chaetognatha Community of the Agulhas Current: Its Structure and Related Properties ..... J. H. Stone 433

The Breeding Migrations and Interhabitat Wandering of the Vermilion-Spotted Newt *Notophthalmus viridescens* (Rafinesque) ..... S. H. Hurlbert 465